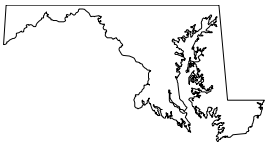
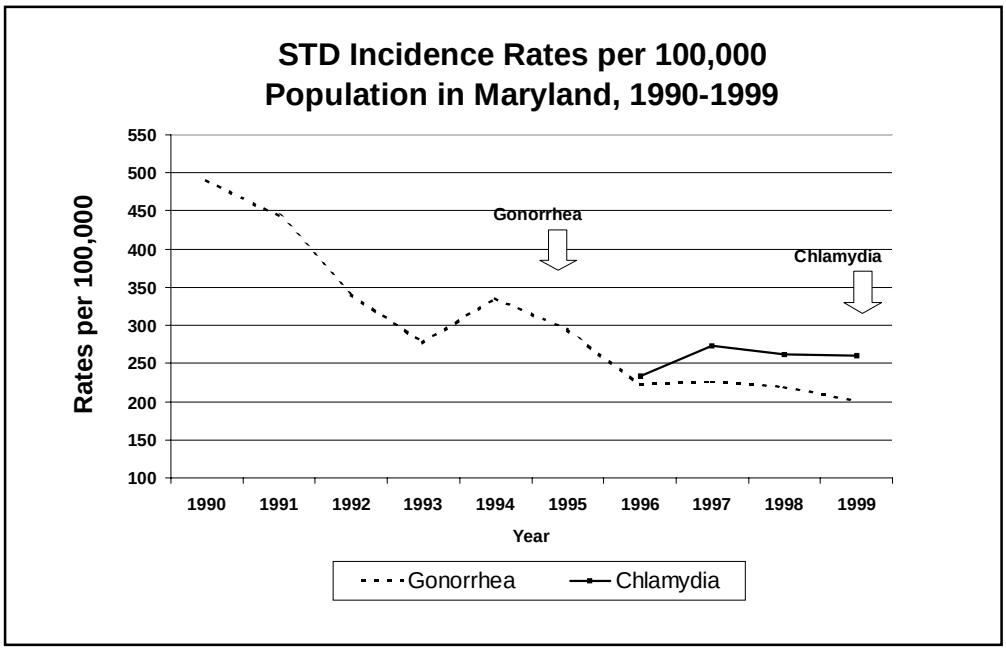


PREVENTING SEXUALLY TRANSMITTED DISEASES

Problem

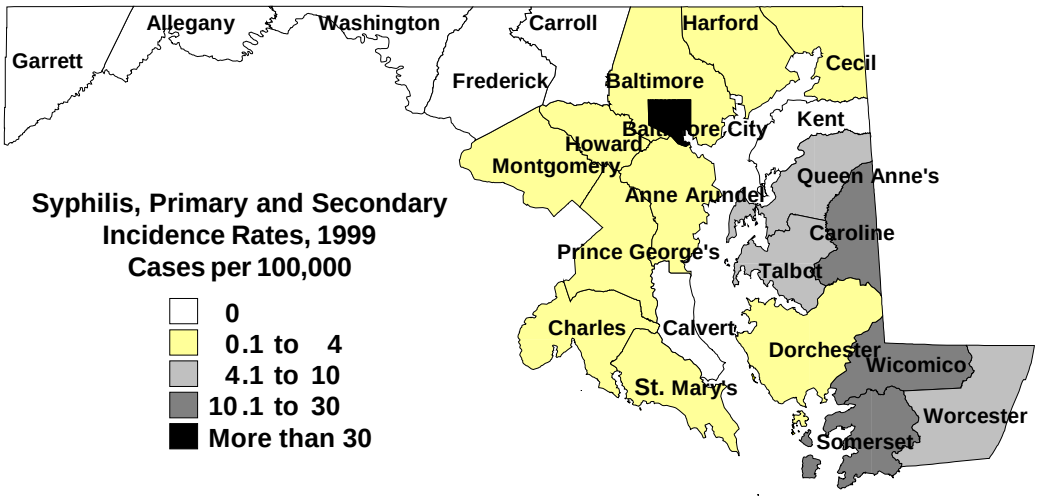
Sexually transmitted diseases (STDs) are among the most widespread, least detected, and costly infectious diseases reported throughout the world today. Of the top 10 most frequently identified cases of infectious diseases reported to the CDC, five are STDs. Despite the burdens, costs, complications, and preventable nature of STDs, they remain a significant public health problem, largely unrecognized by the American public, policymakers, and public health and health care professionals. STDs cause many harmful, often irreversible, and costly clinical complications such as reproductive health problems, fetal and perinatal health problems, congenital birth defects, fetal deaths, and cancer. In addition, studies of the worldwide Human Immunodeficiency Virus (HIV) pandemic link other STDs to a causal chain of events in the sexual transmission of HIV infection.



Source: Maryland DHMH Center for Community Epidemiology, 2000

Although Maryland experienced downward trends in the case numbers and rates of STDs in the beginning of the 1990s, there have always been existing differences among those groups in the population most infected with the diseases. Clearly, women, adolescents, minorities, and African- Americans disproportionately suffer the most. However, in 1997 Maryland's rate of infectious syphilis (17.4 cases per 100,000 with 71 cases of congenital syphilis) was the highest in the nation. Seventy-five percent of the State's infectious syphilis cases were in Baltimore City. Then, through major collaborative efforts among Department of Health and Mental Hygiene (DHMH), the Baltimore City and local county health departments, the Maryland Department of Public Safety and Corrections, community-based organizations and the Centers for Disease Control (CDC), the Maryland rates for infectious syphilis in 1999 declined to 6.6 per 100,000 and congenital syphilis declined to 27 cases per 100,000. Despite these all out efforts, there still remains much to do if Maryland is to bring its rates for infectious syphilis in line with the CDC's national goal of 0.4 per 100,000 in 2010.

Primary and Secondary Syphilis in Maryland, 1999



Source: Maryland and DHMH Center for Community Epidemiology, 1999.

Since 1990, reported cases of gonorrhea have declined 52%. Baltimore City accounts for 62% of reported cases, with a 4% increase in 1998. Other high-prevalence areas for gonorrhea include Dorchester, Wicomico, and Prince George's counties. Eighty-one percent of gonorrhea is reported in the 15- to 34-year-old age group. Despite declining rates, in 1998, Maryland's rate of 219 per 100,000 was almost double the national rate of 121 per 100,000.

Chlamydia trachomatis became a reportable condition by laboratories in October 1994. Since 1996, cases of *Chlamydia trachomatis* have steadily declined; however, this disease continues to be the most frequently identified STD in Maryland. In 1998, there were 13,450 case reports. Eighty-five percent of cases were among women in the 15 to 29 age group. This is a fact most attributable to the routine screening of women in this age group. High-prevalence areas reporting more than 300 cases per 100,000 continue to be in Baltimore City, and Somerset, Wicomico, Worcester, Dorchester, and Prince George's counties.

Viral STDs such as Hepatitis B (HBV), the only vaccine preventable STD, and Human Papilloma Virus (HPV) are STD diseases whose consequences may result in serious life-threatening disease, including cancer. Hepatitis B can cause chronic, and often unrecognized infection, including infections among maternal patients, and complications leading to liver cancer, and liver failure. One percent of those infected may die from acute disease. Although the Vaccines for Children Program provides HBV vaccines for children up to their 19th birthday, it is the 19- to 25-year-olds who are at highest risk for sexually transmitted HBV infection. Infection with HPV has been linked to the subsequent development of cervical cancer. Major public health initiatives to reduce and/or eliminate these diseases in the population are lacking and are therefore deserving of public health initiatives in the Healthy People 2010 campaign.

Determinants

There are many complex major determinants that contribute to the prevalence of STDs in society. These include:

1. Biological factors such as unprotected sex, the often asymptomatic nature of STDs, the lag time between infection and the onset of disease and complications, and the greater susceptibility of infection among women, adolescents, and young adults.
2. Lack of access to health care, defined as lack of access to publicly supported STD clinics, having no medical coverage, having coverage that imposes a copayment or deductible, or having coverage that excludes the basic preventive health services that help avert STDs and their complications.
3. Many behavioral and social factors place individuals in “at risk” situations. The primary behavioral factor is a lack of personal responsibility leading to participation in “at risk “ behaviors that can contribute to infection. These include unprotected sex, substance abuse, sexual coercion, domestic violence, sex work, and cultural attitudes toward sexual activities.

STDs disproportionately affect disenfranchised persons and persons who are in social networks in which high-risk sexual behavior is common and either access to care or health seeking behavior is compromised. Some disproportionately affected groups include adolescents, those living in poverty, immigrant workers, people in detention centers and sex workers (people who exchange sex for money, drugs, or other goods).

Perhaps the most important social factor contributing to the spread of STDs in the U.S., and the factor that most significantly separates the U.S. from those industrialized countries with low rates of STDs, is the stigma associated with STDs and Americans’ general discomfort with discussing intimate aspects of life, especially those related to sex. In addition, sex and sexuality pervade many aspects of the nation’s culture, and people in the U.S. are fascinated with sexual matters. Paradoxically, while sexuality is considered a normal aspect of human functioning, Americans, nevertheless, are secretive and private about their sexual behavior. This secrecy surrounding sexuality impedes sexuality education programs for adolescents, open discussion between parents and their children and between sex partners, balanced messages from mass media, education and counseling activities of health care professionals, and community activism regarding STDs.

High-Risk Sub-Populations

Although any Maryland resident who participates in risky sexual behaviors could contract a STD, there are certain sub-populations within Maryland that are more at risk for infection than others. The three major subpopulations in Maryland are:

- **Women:** Women are more susceptible to STDs than men. Among the most serious STD complications are pelvic inflammatory disease, ectopic pregnancy, infertility, cervical cancer and chronic pelvic pain as well as complications during pregnancy that can cause serious illness or death to the fetus or newborn. Women are biologically more susceptible to STD due to the anatomic nature of their reproductive tract which in turn can contribute to a delay in diagnosis and treatment of infection.

- **Adolescents:** For a variety of behavioral, social, and biological reasons, STDs disproportionately affect adolescents and young adults. Adolescent girls have a higher risk for infection than older women partly because the cervix of adolescent females is covered with cells that are especially susceptible to STDs, such as chlamydia. In addition, sexually active teenagers often are reluctant to obtain STD services, or may face serious obstacles when trying to obtain them. Similiarly, health care providers often are uncomfortable discussing sexuality and risk reduction with their patients, thus missing opportunities to counsel and screen young people for STDs.

- **African-American and Hispanic populations:** Race and ethnicity in the U.S. are risk markers that correlate with other fundamental determinants of health status, such as poverty, limited or no access to quality health care, fewer attempts to get medical treatment, substance abuse, and living in communities with a high number of cases of STDs.

Objective 1 - Reduce the rate of gonorrhea from 202.7 per 100,000 in 1999 to no more than 19 per 100,000 in 2010.

Objective 2 - Reduce the rate of syphilis from 6.7 per 100,000 in 1999 to no more than 0.4 per 100,000 in 2010.

Objective 3 - Prevent the rate of chlamydia of 263.8 per 100,000 in 1999 from rising above 300 per 100,000 in 2010.

Objective 4 - Reduce the cases of congenital syphilis from 26 per 100,000 in 1999 to zero in 2010.

Objective 5 - Develop baselines consistent with CDC recommendations to reduce consequences of human papilloma viral (HPV) infection.

Objective 6 - Develop adult immunization programs for Hepatitis B.

Action Steps

- ⇨ Promote rapid identification and follow-up of persons with STDs to assure adequate treatment, education, and partner counseling and referral services.
- ⇨ Provide screening services to high-risk populations with no symptoms (e.g., in family planning and teen clinics, detention centers).
- ⇨ Support community and school outreach efforts that promote risk reduction behaviors, symptom recognition, and early treatment.
- ⇨ Promote abstinence, monogamy, and sexual responsibility.
- ⇨ Educate the community about all sexually transmitted diseases, including viral STDs.
- ⇨ Build the public health infrastructure to eliminate STDs in accordance with CDC recommendations.

Partners

AIDS Administration, DHMH • Center for Maternal and Child Health, DHMH • Centers for Disease Control and Prevention • Emergency Nurses Association, Maryland Chapter • Epidemiology and Disease Control Program, DHMH • Johns Hopkins University • Maryland Addiction and Substance Abuse Clinics • Maryland Association of Correctional Administrators • Maryland Association of County Health Officers • Maryland Association for Practitioners in Infection Control and Epidemiology • Maryland Chapter of the American College of Emergency Physicians • Maryland Coalition for Healthy Mothers, Healthy Babies • Maryland Commission on Infant Mortality Prevention • Maryland Department of Health and Mental Hygiene (DHMH) • Maryland Department of Public Safety and Corrections • Maryland Family Planning Clinics • Maryland Gynecological and Obstetric Society • Maryland HMOs • Maryland Hospital Association • Maryland Local Health Departments • Maryland Medical Assistance Program, DHMH • Maryland Mental Health Programs • Maryland Perinatal Association • Maryland Pharmaceutical and Medical Device Manufacturers • Maryland State Department of Education • Region III Centers for Education and Training • University of Maryland School of Medicine

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Cross-Reference Table for STDs

See Also

Caroline County 167
Kent County 234